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10/006,583	12/10/2001	Giorgio Barzaghi	Q67651	3491

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SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037-3213

EXAMINER

KNOLL, CLIFFORD H

ART UNIT	PAPER NUMBER
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2112

DATE MAILED: 01/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Applicati n No.

10/006,583

Applicant(s)

BARZAGHI ET AL.

Examiner

Clifford H Knoll

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This Office Action is responsive to communication filed 10/5/04. Currently claims 1-14 are pending.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 102***

1. *Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by James (US 6728821).*

Regarding claim 1, James discloses a common bus; connecting two or more control units through said common bus (e.g., col. 4, lines 33-49); controlling, through each control unit, at least one peripheral unit of the device to provide data essential to the operation of the peripheral unit and to detect possible data variations in said peripheral unit (e.g., col. 9, lines 36-40); and providing a master controller connected to the common bus and further the steps, carried by each of said control units, of: submitting information concerning the consumed data and those provided by the peripheral units controlled by said control units, to said master control (e.g., col. 8, lines 59-65); and sending a message over the bus whenever at least one of the data provided by the peripheral units controlled by said control units varies (e.g., col. 8, lines 53-57).

Regarding claim 2, James also discloses the step of submitting information to the master controller comprises the step of transmitting to the master controller the structure of its own message comprising information provided and/or information consumed/acquired (e.g., col. 8, lines 7-8).

Regarding claim 3, James also discloses the step of assigning a suitable address to each of said control units (e.g., col. 7, lines 37-40).

Regarding claim 4, James also discloses information concerning the control unit that has detected a data variation in the controlled peripheral unit/units and information concerning the control units that will consume the transmitted data (e.g., col. 7, lines 56-57).

Regarding claim 5, James also discloses the information concerning the control units that will consume the transmitted data comprise a logic address for representing a group of control units consuming the same data item (e.g., col. 10, lines 39-41).

Regarding claim 6, James also discloses the step of providing each control unit with a counter that counts forward at each message sent by said control unit (e.g., Figure 6, "Time Stamp").

Regarding claim 7, James also discloses the step of writing the value of said counter into every message that is sent (e.g., col. 6, line 63).

Regarding claim 8, James also discloses at least one control bit to control the regularity of the information exchange (e.g., Figure 6, "Clock-Sync").

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Regarding claim 9, James also discloses disabling said master controller after having established the communication between said control units (e.g., col. 8, lines 14-19).

Regarding claim 10, James also discloses wherein said device is a device for receiving/transmitting and processing signals in radio link systems (e.g., col. 4, lines 52-53).

Regarding claim 11, James discloses two or more peripheral units, the apparatus comprising: two or more control units, each control unit controlling at least one peripheral unit of the device to provide data necessary for the operation of the peripheral unit and detect possible data variations of said peripheral unit; a common bus for connecting said two or more control units (e.g., col. 4, lines 33-49); wherein the apparatus further comprises a master controller connected to the common bus and wherein there are provided, in each control unit: means for submitting, to said master controller information concerning the consumed data and the ones provided by the peripheral units that are controlled by said control units (e.g., col. 8, lines 59-65); and means for sending a message (M) whenever at least one of the data provided by the peripheral units controlled by said control units varies (e.g., col. 8, lines 53-57).

Regarding claim 12, James also discloses wherein said device is a device for receiving/transmitting and processing signals in radio link systems (e.g., col. 4, lines 52-53).

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Regarding claim 13, James also discloses program code means adapted to perform one or more of the steps of the method according to claim 1 when said program is run on a computer (e.g., col. 5, lines 12-14).

Regarding claim 14, James also discloses computer-readable medium having a program recorded thereon, said computer readable medium comprising computer program code means adapted to perform one or more of steps of the method according to claim 1 when said program is run on a computer (e.g., col. 5, lines 12-14).

2. *Claims 1-9, and 11-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Takabatake (US 8728244).*

Regarding claim 1, Takabatake discloses a common bus; connecting two or more control units through said common bus (e.g., col. 3, lines 50-55); controlling, through each control unit, at least one peripheral unit of the device to provide data essential to the operation of the peripheral unit and to detect possible data variations in said peripheral unit (e.g., col. 9, lines 36-40); and providing a master controller connected to the common bus and further the steps, carried by each of said control units, of: submitting information concerning the consumed data and those provided by the peripheral units controlled by said control units, to said master control (e.g., col. 9, lines 24-25); and sending a message over the bus whenever at least one of the data provided by the peripheral units controlled by said control units varies (e.g., col. 10, lines 52-54).

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Regarding claim 2, Takabatake also discloses the step of submitting information to the master controller comprises the step of transmitting to the master controller the structure of its own message comprising information provided and/or information consumed/acquired (e.g., col. 10, lines 52-54).

Regarding claim 3, Takabatake also discloses the step of assigning a suitable address to each of said control units (e.g., col. 9, lines 8-9).

Regarding claim 4, Takabatake also discloses information concerning the control unit that has detected a data variation in the controlled peripheral unit/units and information concerning the control units that will consume the transmitted data (e.g., col. 13, lines 4-11).

Regarding claim 5, Takabatake also discloses the information concerning the control units that will consume the transmitted data comprise a logic address for representing a group of control units consuming the same data item (e.g., col. 12, lines 51-52).

Regarding claim 6, Takabatake also discloses the step of providing each control unit with a counter that counts forward at each message sent by said control unit (e.g., col. 18, lines 6-8).

Regarding claim 7, Takabatake also discloses the step of writing the value of said counter into every message that is sent (e.g., col. 18, lines 6-8).

Regarding claim 8, Takabatake also discloses at least one control bit to control the regularity of the information exchange (e.g., Figure 8, "Ack\_Complete").

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Regarding claim 9, Takabatake also discloses wherein said device is a device for receiving/transmitting and processing signals in radio link systems (e.g., col. 3, lines 60-61).

Regarding claim 11, Takabatake discloses two or more peripheral units, the apparatus comprising: two or more control units, each control unit controlling at least one peripheral unit of the device to provide data necessary for the operation of the peripheral unit and detect possible data variations of said peripheral unit; a common bus for connecting said two or more control units (e.g., col. 3, lines 50-55); wherein the apparatus further comprises a master controller connected to the common bus and wherein there are provided, in each control unit: means for submitting, to said master controller information concerning the consumed data and the ones provided by the peripheral units that are controlled by said control units (e.g., col. 9, lines 24-25); and means for sending a message whenever at least one of the data provided by the peripheral units controlled by said control units varies (e.g., col. 10, lines 52-54).

Regarding claim 12, Takabatake also discloses wherein said device is a device for receiving/transmitting and processing signals in radio link systems (e.g., col. 3, lines 60-61).

Regarding claim 13, Takabatake also discloses program code means adapted to perform one or more of the steps of the method according to claim 1 when said program is run on a computer (e.g., col. 5, lines 28-35).

Regarding claim 14, Takabatake also discloses computer-readable medium having a program recorded thereon, said computer readable medium comprising computer

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program code means adapted to perform one or more of steps of the method according to claim 1 when said program is run on a computer (e.g., col. 5, lines 28-35).

### ***Response to Arguments***

Applicant's arguments filed 10/5/04 have been fully considered but they are not persuasive.

Regarding the rejection using James, Applicant argues that "nothing in James indicates that such controllers together constitute a control apparatus" (pp. 16-17); however any feature that comprises control units constitutes a control apparatus; whatever distinction intended by the Applicant in the recited control apparatus is not supported by the claims.

Applicant further argues that James "does not teach or suggest that the control unit controls a peripheral unit" (p. 17); however James is seen to disclose the recited control of "through each control unit, at least one peripheral unit of the device". James teaches "[t]he consumer electronic devices 120-160 may include, for example, a printer, additional monitor, a video camcorder, an electronic still camera, a video cassette recorder, digital speakers, a personal computer, an audio actuator, a video actuator, or any other consumer electronic device that includes a serial interface which complies with a serial interface standard" (col. 4, lines 38-42). That these complex devices consist of several peripheral units is quite clear; for example, James notes "any other appropriate consumer electronic device capable of being connected via a high speed serial bus 180. In one embodiment, the device 120 includes a controller 202, memory

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208, and I/O 210, all connected via bus 215" (col. 4, lines 56-60). If there is a particular arrangement of peripheral units in the device that distinguishes from James, it fails to find support in the claims.

Applicant argues that nothing in James indicates "that a controller sends information about data consumed" (p. 17); however James at the cited passage states: "Messages are exchanged between the talker 902 and listener's controller 906 when a change in the bandwidth allocated for isochronous data traffic is requested. For example, a change in bandwidth may be requested when a talker 902, sending highly compressed isochronous video data, begins sending lightly compressed isochronous video data to a listener 904". The Examiner determines that sending a message responsive to data consumed (i.e., James' "lightly compressed isochronous video data") constitutes information concerning the consumed data.

Regarding the rejection using Takabatake, Applicant argues that Takabatake does not "output information concerning data consumed" (p. 19); however Takabatake discloses "node to be controlled (radio terminal 121) that received this AV/C command completes a processing corresponding to the received command within 100 msec, and returns a processing execution result for this command" (col. 9, lines 36-40). In this case, the command is the data consumed and the response is the information concerning the data consumed. Whatever distinction from this interpretation is intended is not supported by the claims.

Applicant further argues that Takabatake does not disclose "detecting possible data variations" (p. 19) nor does he teach "sending a message whenever at least one of

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the data provided by the peripheral units varies; however, as these features are recited, so Takabatake anticipates. Takabatake discloses “the node to be controlled (radio terminal 121) that received this AV/C command completes a processing corresponding to the received command within 100 msec, and returns a processing execution result for this command to the 1394 node 101 which is the controlling node (AV/C response)” (col. 9, lines 36-39). The data variation is the successful decoding of a data variation (the command signal) as a command. Examiner has withdrawn the previous rejection of this language as indefinite; however, it is determined that a “sending a message whenever ... data ... varies” covers a broad range of embodiments, including numerous command/response scenarios, including the particular embodiment of Takabatake. The recitation supports no distinction.

Applicant does not find the master controller in Takabatake (p. 20). To clarify, the master controller is Takabatake's node 101.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clifford H Knoll whose telephone number is 571-272-3636. The examiner can normally be reached on M-F 0630-1500.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark H Rinehart can be reached on 571-272-3632. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**MARK H. RINEHART**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2100**

chk